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## Abstract

Retaining high quality school-based agricultural education teachers is a growing concern across the United States. This study focused on mid-career agricultural education teachers' perceptions of job stress, burnout, job satisfaction, and professional development needs related to National Quality Program Standards for Secondary Agriculture Education (The National Council for Agricultural Education, 2009). The target population for this study was participants in the 2013 NAAE eXcellence in Leadership for Retention (XLR8) professional development program. Overall, XLR8 participants indicated the highest levels of job stress related to Standard 2 – Experiential Learning and Standard 7 – Program Planning and Evaluation. Participants were least stressed over Standard 6 – Certified Agriculture Teachers and Professional Growth, which also ranked lowest in terms of desired professional development. The most sought-after area of professional development included Standard 2 – Experiential Learning and Standard 1 – Program Planning and Instruction. Findings suggest XLR8 participants experience “moderate” levels of burnout in each of three categories measured by the Maslach Burnout Inventory for Educators, however are generally satisfied with their job.

## Keywords

mid-career, agricultural education teachers, job stress, burnout, professional development, retention

## Disciplines

Agricultural Education | Teacher Education and Professional Development

## Comments

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# **Job Stress, Burnout, and Professional Development Needs of Mid-Career Agricultural Education Teachers**

Amy R. Smith<sup>1</sup> & Scott Smalley<sup>2</sup>

## **Abstract**

*Retaining high quality school-based agricultural education teachers is a growing concern across the United States. This study focused on mid-career agricultural education teachers' perceptions of job stress, burnout, job satisfaction, and professional development needs related to National Quality Program Standards for Secondary Agriculture Education (The National Council for Agricultural Education, 2009). The target population for this study was participants in the 2013 NAAE eXcellence in Leadership for Retention (XLR8) professional development program. Overall, XLR8 participants indicated the highest levels of job stress related to Standard 2 – Experiential Learning and Standard 7 – Program Planning and Evaluation. Participants were least stressed over Standard 6 – Certified Agriculture Teachers and Professional Growth, which also ranked lowest in terms of desired professional development. The most sought-after area of professional development included Standard 2 – Experiential Learning and Standard 1 – Program Planning and Instruction. Findings suggest XLR8 participants experience “moderate” levels of burnout in each of three categories measured by the Maslach Burnout Inventory for Educators, however are generally satisfied with their job.*

**Keywords:** mid-career, agricultural education teachers, job stress, burnout, professional development, retention

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## **Introduction**

Despite numerous rewards and benefits articulated through anecdotes and personal stories, teaching has been described as one of the most stressful professions of the 21<sup>st</sup> century (Kyriacou, 2000). On top of daily teaching tasks, enhanced educational technology, increased student diversity, decreased school funding, and heightened accountability measures exacerbate stress among educators. Additionally, educators also face scrutiny from multiple stakeholder groups, each with its own perspectives and expectations (Fullan, 2001; Guglielmi & Tatrow, 1998; Patterson, Collins, & Abbott, 2004).

The nature of school-based agricultural education further complicates this issue. Arguably, an agricultural education teacher is expected to fulfill a variety of roles in addition to those of a *typical* classroom teacher. As such, the workload of teachers in agricultural education extends beyond a typical teacher's work week (Torres, Lawver, & Lambert, 2009). A study by Greiman, Walker, and Birkenholz (2005) determined agricultural teachers experience challenges that yield particular job stressors. Efforts to better understanding challenges and stressors may allow teacher

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educators to better prepare program graduates for expectations of the profession. Failure to address these issues will likely lead to decreased career satisfaction and diminish an individual's willingness or desire to remain in the classroom (Chenevey, Ewing, & Whittington, 2008).

With consideration to teacher preparation, challenges and job stress, significant research has been conducted with entry-level, new, or beginning teachers. Often, Moir's (1990) work identifying phases of first year teaching is cited as justification for induction or mentoring programs designed to guide new teachers through phases of anticipation, survival, disillusionment, rejuvenation, and reflection. Prior research has explored professional development needs of beginning agricultural education teachers, suggesting the need for professional development focused on classroom and behavior management (Joerger, 2002; Joerger & Boettcher, 2000). Additional studies (Birkenholz & Harbstreit, 1987; Edwards & Briers, 1999) also identified needs related to working with support groups and preparing for FFA events.

Meeting needs of beginning teachers in agricultural education is an essential consideration when addressing the supply and demand issues which seem to plague the profession. However, could it be that others within the profession are being overlooked? Might a gap exist in the support provided to agricultural education teachers beyond the induction period? If so, what efforts might assist in meeting the needs of these individuals? Priority six of the American Association of Agricultural Education (AAAE) National Research Agenda identifies the important role that agricultural and extension educators play in ensuring Vibrant, Resilient Communities (Roberts, Harder, & Brashears, 2016). Particularly, issues including resiliency and burnout must be addressed to retain leaders in agricultural education (Graham, Arnold, & Jayaratne, 2016).

### **Conceptual Framework**

Outside of agricultural education, various stages of teachers' professional life cycles have been researched for quite some time (Fessler, 1985; Huberman, 1989; Moir, 1990; Steffy & Wolfe, 2001; White, 2008). Fessler's career cycle model for teachers includes the following stages: pre-service, induction, competency building, enthusiastic and growing, career frustration, stable and stagnant, career wind-down, and career exit. Fessler's model also incorporates two additional considerations – personal environment and organizational environment. Huberman categorized the life cycle of teachers differently, narrowing them into three primary categories (novice, mid-career and late-career) aligning with five phases: career entry–discovery and survival (1 to 3 years), stabilization (4 to 6 years), experimentation/diversification (7 to 18 years), serenity (19 to 30 years), and disengagement (31 years and beyond). An additional model proposed by Steffy and Wolfe suggests similar stages, including novice, apprentice, professional, expert, distinguished, and emeritus. As teachers progress through the respective career stages, they either enter a renewal or withdrawal cycle (Steffy & Wolfe, 2001).

To retain teachers and ensure a positive trajectory through the career cycle, opportunities for professional development, support and renewal must be provided. In fact, Steffy and Wolfe's (2001) model is rooted in transformative learning and emphasizes the importance of the reflection-renewal-growth cycle. Specifically, they offer the following:

One of the basic tenets of transformative learning (Mezirow, 1991, xiii) is that "not so much what happens to people but how they interpret and explain what happens to them that determines their actions, their hopes, their contentment and emotional well-being, and their performance." ... The Life Cycle Model is an application on Mezirow's transformation theory. As teachers progress throughout their careers, they can engage in transformational processes including critical reflection on

practice, redefinition of assumptions and beliefs, and enhanced self worth. Or they can disengage from the work environment as a source and stimulation for new learning and begin the gradual decline into professional withdrawal (Steffy & Wolfe, p. 17).

According to Berman (2004), “Talented teachers will not last long in a culture that undermines or is neutral to their needs and interests, leaves them isolated, or fails to promote their growth” (p. 118). While Berman’s work is focused on recruitment and retention of teachers into a particular school district, multiple applications exist for the agricultural education profession as well. He suggests a “critical period” exists for teachers with 4-6 years of experience, when they decide whether or not to continue in the field of education (Berman, p. 133). Earlier and more challenging professional development, the opportunity for leadership roles, and deeper dialogue with colleagues are cited as ways to increase commitment to a school district and profession.

Historically, many professional development programs in agricultural education have focused only on early career teachers. State mentoring or induction programs, regional new teacher workshops, and the National Association of Agricultural Educators (NAAE) Teacher Turn the Key program provide excellent resources and support for beginning agricultural educators. More recently, however, NAAE (2016) has begun to acknowledge the varying needs that exist among school-based agricultural education teachers as a result of career life cycle (see Figure 1) and offer customized professional development.

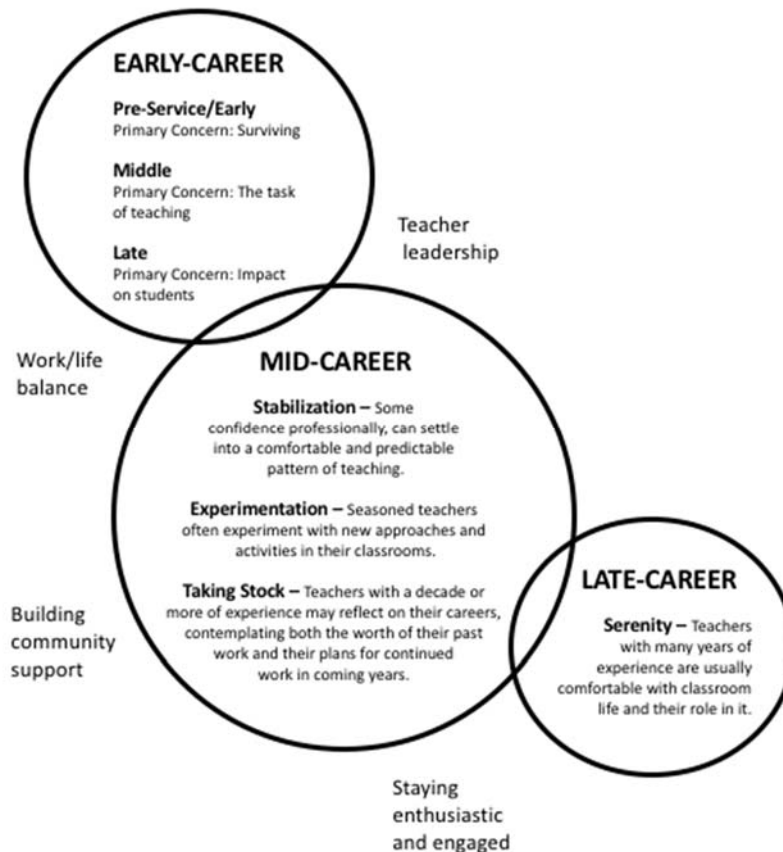


Figure 1. NAAE (2016) Ag Teacher’s Life Cycle.

In recent years, NAAE and state agriculture teacher associations have begun to offer targeted professional development for mid- and late-career agricultural education teachers. Specifically, for mid-career teachers, NAAE (2016) suggested professional development should focus on further developing pedagogical and technical skills, recognizing achievements, assisting teachers generate support from local decision-makers, develop teacher leaders by providing leadership opportunities, and support teacher wellness and work-life balance. For late-career agricultural education teachers, NAAE is committed to presenting new challenges, developing capacity for mentoring, and providing opportunities to become national leaders.

In response to a lack of available professional development specifically designed for mid-career agricultural education teachers, in 2013, NAAE developed an institute called eXcellence in Leadership for Retention (XLR8). This program was designed to meet the needs of agricultural education teachers with 7 to 15 years of teaching experience. Research regarding this initiative will better enable state and national leaders and teacher educators to identify professional development needs of agricultural teachers in this particular career stage; responding to needs identified will likely increase agricultural education teacher resiliency and decrease burnout.

### **Purpose/Objectives**

The purpose of this study was to describe perceived job stress, burnout, and professional development needs of mid-career agricultural education teachers. The following objectives were identified to guide this research:

1. Describe the demographic characteristics of secondary agricultural education teacher participants in the 2013 NAAE eXcellence in Leadership for Retention (XLR8) professional development program.
2. Determine XLR8 participants' current level of job stress related to National Quality of Program Standards for Secondary Agriculture Education (The National Council for Agricultural Education, 2009).
3. Identify XLR8 participants' perceived needs for professional development and support, as aligned to the National Quality Program Standards (NQPS) for Secondary Agriculture Education (The National Council for Agricultural Education).
4. Determine the degree of burnout experienced by mid-career agricultural education teachers participating in XLR8.
5. Determine the level of job satisfaction of mid-career agricultural education teachers participating in XLR8.

### **Methods/Procedures**

The target population of this descriptive study consisted of agricultural education teachers with 7-15 years of teaching experience, who applied for and were accepted into the 2013 NAAE XLR8 professional development program for mid-career agricultural education teachers (N=20). National Association of Agricultural Educators staff provided a reliable frame, consisting of names and contact information for each of the participants. The authors acknowledge that because this study focused on mid-career agricultural education teachers who were willing participants in a national professional development program, findings may not be representative of all mid-career agricultural education teachers.

A census was conducted, given the small number of XLR8 participants and the ease of contacting participants via email to encourage participation. An online instrument was developed and distributed via email using Qualtrics. In addition to demographics, the instrument consisted of

three primary components: Job Stress and Professional Development Needs based upon the National Quality Program Standards (NQPS) for Secondary Agricultural Education (The National Council for Agricultural Education, 2009), Burnout, and Job Satisfaction. Each of the three components of the instrument is further outlined below.

### **Job Stress and Professional Development Needs (Based Upon NQPS)**

Brewer and McMahan-Landers (2003) noted, “Stress can occur if there is a mismatch between the reality of the work environment and an individual’s perceptions of the work environment” (p.126). Despite best efforts among teacher educators to prepare program graduates, often agricultural education teachers comment about stress associated with running an agricultural education program and balancing all components – particularly classroom instruction, FFA, and Supervised Agricultural Experiences. However, a total program extends even beyond those three components.

For this study, an agricultural education teacher’s self-perceived job stress was sought in context of the NQPS (The National Council for Agricultural Education, 2009). Because of the varied roles and responsibilities expected of an agricultural education teacher in providing leadership for a comprehensive agricultural education program, the NQPS were used to focus items in this section of the instrument. The NQPS was created to be a standardized means of evaluating a total agricultural education program, from facilities, to curriculum, to leadership, to marketing. Further, the NQPS can serve as an active evaluation tool for a program, highlighting everything that an *ideal* or *exemplary* agriculture program should offer (National Association of Agricultural Educators, 2010).

In its entirety, the NQPS may overwhelm a secondary agricultural education teacher. Therefore, the first section of this instrument was developed using abbreviated Standard Statements (see Table 1) from each of the seven program areas necessary for a high quality, well-balanced secondary agriculture program. XLR8 participants were asked to indicate their level of stress related to each of the program standards (using a rating scale with seven descriptors ranging from “not at all stressed” to “extremely stressed”) and rank the standards in order of professional development needs (1 = standard most want/need addressed through professional development; 7 = standard least want/need addressed through professional development). Face and content validity for this researcher-developed component was established by a panel of experts.

Table 1

*National Program Quality Standards for Secondary Agricultural Education*

Standards Statement
<p>Standard 1-1: Curriculum &amp; Program Design  <i>A standards-based curriculum in Agriculture, Food &amp; Natural Resources Systems is delivered through an integrated model that incorporates classroom and laboratory instruction, experiential learning and student leadership &amp; personal development.</i></p> <p>Standard 1-2: Instruction  <i>Programs promote academic achievement and skill development of all students through year-round instruction.</i></p> <p>Standard 1-3: Facilities &amp; Equipment  <i>The facilities and equipment support implementation of the program and curriculum by providing all students opportunities for the development and application of knowledge and skills.</i></p> <p>Standard 1-4: Assessment  <i>Programs utilize multiple methods to assess student learning that illustrates academic achievement and skill development.</i></p> <p>Standard 2: Experiential Learning  <i>Education is enhanced through active participation by all students in a year-round experiential learning program.</i></p> <p>Standard 3: Leadership Development  <i>All students participate in year-round intra-curricular agricultural student organization programs and activities.</i></p> <p>Standard 4: School &amp; Community Partnerships  <i>School and community partners are engaged in developing and supporting a quality program</i></p> <p>Standard 5: Marketing  <i>Key stakeholders are continually asked, involved, recognized and informed about all components of the integrated program.</i></p> <p>Standard 6: Certified Agriculture Teachers &amp; Professional Growth  <i>Competent and technically certified agriculture teachers provide the core of the program.</i></p> <p>Standard 7: Program Planning &amp; Evaluation  <i>A system of needs assessment and evaluation provides information necessary for continual program development and improvement.</i></p>



## **Burnout**

Researchers have noted teachers who face stress for a period of time may ultimately experience burnout (Troman & Woods, 2001). This condition is often observed in human services areas including education, law enforcement, emergency services, and social work. Burnout can result from work overload, lack of fairness in assignments, uneven distribution of rewards, and/or lack of community among staff (Maslach & Jackson, 1981).

The second component of the instrument was Maslach's Burnout Inventory for Educators (MBI-E). The MBI-E is the predominant instrument used to assess burnout in teachers (Maslach, Jackson & Schwab, 1986). The rights to utilize this 22-item instrument were purchased from MindGarden, Inc. because of the instrument's direct applicability to teachers and its ability to measure three different dimensions of burnout: Personal Accomplishment (PA), Depersonalization (DP), and Emotional Exhaustion (EE). The Personal Accomplishment subscale indicates a teacher's feelings regarding contributions they make to student growth and achievement, while Depersonalization refers to the attitudes towards ones' students (Maslach et al., 1996). Emotional Exhaustion describes the fatigue that develops when an individual is emotionally drained. Because of its extensive use and commercial availability, validity, and reliability have been previously assessed for the MBI-E. Two factor analysis studies conducted between 1981 and 1984 support the use of this instrument (Gold, 1984; Iwanicki & Schwab, 1981). The instrument reported a Cronbach's alpha reliability ranging from .72 to .90.

## **Job Satisfaction**

Cano and Castillo (2004) determined a one-item measure of job satisfaction was a relevant measure of job satisfaction versus a multi-item measure. The researchers "standardized and compared" (Cano & Castillo, p. 71) the one-item and multi-item instrument and found no differences. It was concluded a one-item measurement can assess job satisfaction adequately. Therefore, job satisfaction was assessed by asking XLR8 participants the following question, "How satisfied are you with your job?" The single-item question required a response on a rating scale with seven descriptors ranging from "strongly dissatisfied" to "strongly satisfied."

## **Data Collection and Analysis**

A modified version of Dillman's (2007) tailored design method was used in developing this descriptive survey design. An initial pre-notice invitation was sent to all XLR8 participants embedded in communication from NAAE staff. A day later, researchers sent an email containing a description of the study, invitation to participate, and link to the online instrument to each participant. Program participants were asked to complete all portions of the instrument prior to the first session of the XLR8 professional development program. Because of a shortened timeframe for administration of the instrument, only two reminder emails were sent. As a result, 18 of the 20 participants completed all segments of the instrument, providing a 90% response rate. One participant began the instrument, but discontinued because of technology issues. All data were analyzed in SPSS using descriptive statistics, primarily frequencies and percentages.

## **Findings**

Through research objective one, researchers sought to describe demographic characteristics of school-based agricultural education teacher participants in the 2013 NAAE XLR8 professional development program. In total, 20 teachers participated in the program. Eighteen (90%) provided useable data, although only 17 completed the demographics portion. Of the 17

participants who provided demographic data, 12 were female (71%). Three participants reported being 29 years of age or under, eight were 30-35, 4 were 36-40, and two were 41-45 years of age. Only three of the 17 indicated they were alternatively certified to teach agriculture (i.e. post-secondary degree in something other than Agricultural Education, later pursued teacher licensure), with the majority (82%) being traditionally prepared (i.e. completed a post-secondary program of study in Agricultural Education and any required licensure exams). Ten participants (59%) reported Master's degrees, while one reported having completed a Doctorate. Ten participants (59%) indicated they were currently serving, or had served, in a leadership position with their respective state agriculture teachers' association.

Objective two was designed to assist researchers in determining level of job stress, as perceived by XLR8 participants, related to each of the program standards outlined by the NQPS. Participants were asked to read a description for each standard, then indicate their perceived level of job stress related to the statement. Eight of the ten standard statements yielded means of 4.00 or higher, which suggest participants perceive moderate levels of job stress related to each (see Table 2). Two standards had mean scores approaching 4.50; these program standards included Standard 2 – Experiential Learning ( $M = 4.44$ ,  $SD = 1.20$ ) and Standard 7 – Program Planning and Evaluation ( $M = 4.44$ ,  $SD = 1.15$ ). The program standard participants were least stressed about was Standard 6 – Certified Agriculture Teachers and Professional Growth ( $M = 2.28$ ,  $SD = 1.32$ ).

Table 2

*Perceived Level of Stress Related to National Quality Program Standards for Secondary Agricultural Education (n=18)*

Standard		<i>M</i>	<i>SD</i>
Standard 2	Experiential Learning	4.44	1.20
Standard 7	Program Planning & Evaluation	4.44	1.15
Standard 1-1	Curriculum & Program Design	4.17	0.92
Standard 5	Marketing	4.11	1.57
Standard 1-4	Assessment	4.06	1.16
Standard 3	Leadership Development	4.06	1.39
Standard 1-2	Instruction	4.00	1.41
Standard 4	School & Community Partnerships	4.00	1.85
Standard 1-3	Facilities & Equipment	3.28	1.49
Standard 6	Certified Agriculture Teachers & Professional Growth	2.28	1.32

Note. Scale: 1 = Not at all stressed, 4 = Moderately stressed, 7 = Extremely stressed

Frequencies and percentages related to objective two are provided in Table 3. Standard 6 – Certified Agriculture Teachers and Professional Growth was the standard statement that elicited the highest number of “not at all stressed” responses, with Standard 2 – Experiential Learning receiving the most responses at or above “moderately stressed”. No standards received “extremely stressed” responses from participants.

Table 3

*Perceived Level of Stress Related to National Quality Program Standards for Secondary Agricultural Education (n=18)*

Standard	Not At All Stressed		All Stressed		Moderately Stressed						Extremely Stressed			
	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Standard 1-1	0	0.00	0	0.00	4	22.22	9	50.00	3	16.67	2	11.11	0	0.00
Standard 1-2	1	5.56	2	11.11	3	16.67	4	22.22	6	33.33	2	11.11	0	0.00
Standard 1-3	2	11.11	4	22.22	5	27.78	2	11.11	4	22.22	1	5.56	0	0.00
Standard 1-4	0	0.00	0	0.00	8	44.44	4	22.22	3	16.67	3	16.67	0	0.00
Standard 2	1	5.56	0	0.00	1	5.56	7	38.89	6	33.33	3	16.67	0	0.00
Standard 3	1	5.56	1	5.56	4	22.22	5	27.78	4	22.22	3	16.67	0	0.00
Standard 4	2	11.11	4	22.22	1	5.56	0	0.00	7	38.89	4	22.22	0	0.00
Standard 5	2	11.11	1	5.56	2	11.11	4	22.22	6	33.33	3	16.67	0	0.00
Standard 6	6	33.33	6	33.33	3	16.67	1	5.56	2	11.11	0	0.00	0	0.00
Standard 7	0	0.00	1	5.56	3	16.67	4	22.22	7	38.89	3	16.67	0	0.00

Note. Scale: 1 = Not at all stressed, 4 = Moderately stressed, 7 = Extremely stressed

Through objective three, researchers sought to identify areas from the NQPS in which mid-career agricultural education teachers most needed and/or wanted professional development. Participants were asked to rank the seven standard areas from 1 to 7, with 1 being the “most wanted/needed” and 7 being the “least wanted/needed” area for professional development. The most commonly indicated standards needed/wanted by XLR8 participants for professional development (see Table 4) included Standard 2 – Experiential Learning ( $M = 3.11$ ,  $SD = 2.17$ ) and Standard 1 – Program Design and Planning ( $M = 3.17$ ,  $SD = 1.72$ ). The least sought-after standard for professional development by the participants included Standard 6 – Certified Agriculture Teachers and Professional Growth ( $M = 6.60$ ,  $SD = 1.47$ ).

Table 4

*Need for Professional Development for National Quality Program Standards for Secondary Agricultural Education (n=18)*

Standard		<i>M</i>	<i>SD</i>
Standard 2	Experiential Learning	3.11	2.17
Standard 1	Program Design and Instruction	3.17	1.72
Standard 7	Program Planning and Evaluation	3.61	1.82
Standard 4	School and Community Partnerships	3.67	1.78
Standard 5	Marketing	4.11	1.84
Standard 3	Leadership Development	4.72	1.84
Standard 6	Certified Agriculture Teachers and Professional Growth	6.06	1.47

Frequencies and percentages related to objective three are provided in Table 5. Standard 6 – Certified Agriculture Teachers and Professional Growth ranked as the least preferred area for professional development by eleven of the participants, while Standard 2 – Experiential Learning was the most preferred area for professional development according to seven participants.

Table 5

*Need for Professional Development for National Quality Program Standards for Secondary Agricultural Education (n=18)*

Standard	Most Want/Need Addressed in Professional Development						Least Want/Need Addressed in Professional Development							
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Standard 1	3	16.67	4	22.22	5	27.78	2	11.11	2	11.11	1	5.56	1	5.56
Standard 2	7	38.89	2	11.11	1	5.56	3	16.67	1	5.56	3	16.67	1	5.56
Standard 3	1	5.56	2	11.11	1	5.56	4	22.22	2	11.11	5	27.78	3	16.67
Standard 4	2	11.11	4	22.22	2	11.11	4	22.22	3	16.67	2	11.11	1	5.56
Standard 5	2	11.11	2	11.11	3	16.67	1	5.56	7	38.89	1	5.56	2	11.11
Standard 6	0	0.00	0	0.00	2	11.11	2	11.11	0	0.00	3	16.67	11	61.11
Standard 7	2	11.11	3	16.67	6	33.33	1	5.56	2	11.11	3	16.67	1	5.56

With objective four, the researchers sought to identify the degree of teacher burnout experienced by participants of XLR8. Findings suggest that XLR8 participants are experiencing “moderate” levels of burnout in each of the three categories measured by the Maslach Burnout Inventory for Educators, or MBI-E. With consideration given to the interpretation of scores on each construct, the lowest level of burnout was reported on the depersonalization subscale; this refers to attitudes towards ones’ students. The highest level of burnout was on the emotional exhaustion construct (see Figure 2); this subscale describes the fatigue that develops when an individual is emotionally drained. The moderate level of burnout reported by the personal accomplishment subscale reflects the teachers’ feelings regarding contributions to student growth and achievement.

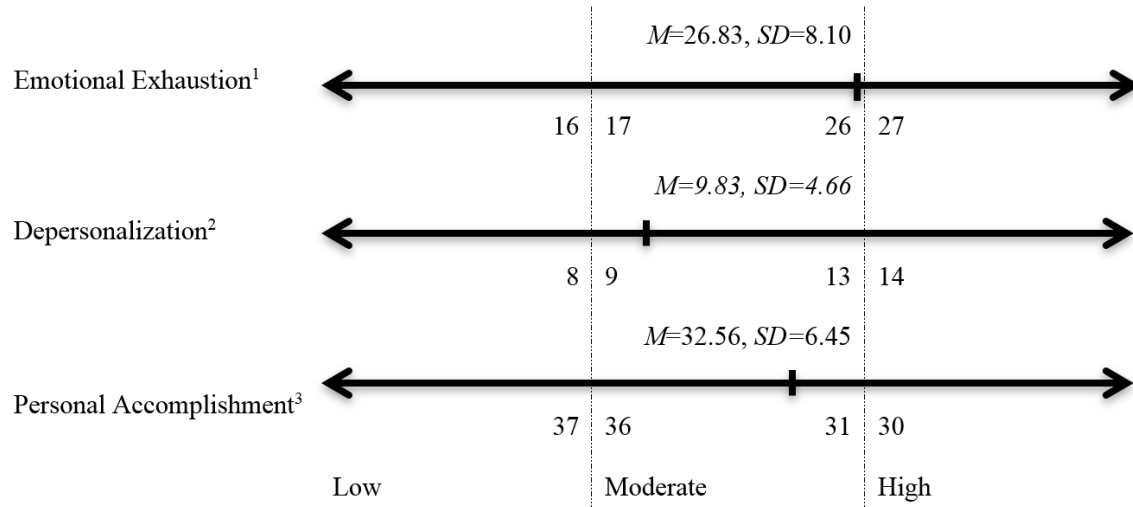


Figure 2. Teacher burnout scale measured by the MBI-E.

Note: Interpretations: <sup>1</sup>EE = high (27 or over), moderate (17-26) and low (0-16). <sup>2</sup>DP = high (14 or over), moderate (9-13) and low (0-8). <sup>3</sup>PA (interpreted in reverse of EE/DP) = low (37 or over), moderate (31-36) and high (0-30).

The fifth and final objective examined the level of overall job satisfaction among XLR8 participants as measured by a single item. Using a seven-point rating scale, where 1 was “strongly dissatisfied” and 7 “strongly satisfied” participants indicated they were generally satisfied with their job ( $M = 5.28$ ;  $SD = 1.02$ ).

### Conclusions/Recommendations/Implications

This study is based upon a small group of mid-career secondary agricultural education teachers involved in the 2013 NAAE XLR8 professional development program. While participants represented nearly twenty different states spanning all of NAAE regions, the researchers recognize that these results should be interpreted with caution. Findings from this study should not be generalized to all mid-career school-based agricultural education teachers. In addition to the limitations due to the size of the population, it is important to note the NAAE XLR8 participants are a unique sub-set of mid-career school-based agricultural education teachers. Each participant chose to apply, and ultimately participate, in this professional development opportunity. As such, the stresses, professional development needs, job satisfaction, and burnout described may not be consistent with experiences and preferences of teachers who chose not to apply or participate. Further research is necessary to appropriately determine if findings are indeed representative of the

larger population of mid-career agricultural education teachers, or if findings for non-XLR8 participants would differ. To meet the needs of all, regardless of career life cycle stage, exploration, research, and dialogue must be continued.

Demographic characteristics of this group did provide some interesting information regarding the profession. Anecdotally, agricultural education leaders have described demographic shifts among new and beginning teachers having observed significant growth in the number of female teachers. This group echoed that trend, with nearly three-fourths of XLR8 participants being female. Additionally, the majority of XLR8 participants were traditionally certified, held advanced degrees, and had held or were currently holding leadership positions in state professional organizations. Are these characteristics true of other mid-career agricultural education teachers? If so, what does that mean for the profession?

With regard to which standards XLR8 participants perceived as the most stressful, Experiential Learning and Program Planning and Evaluation emerged from the list. This seems consistent with findings from Torres, Ulmer, and Aschenbrener (2008) who examined the distribution of time spent on tasks, roles, and responsibilities of teachers at various stages of a career in agricultural education. They found student teachers, first-year teachers, and experienced teachers spent the largest portion of time in planning and instruction. These two areas consumed over half of teachers' time. Given that much time is consumed by short-term planning, teachers may be overwhelmed by the idea of program planning and evaluation that is more comprehensive, requires stakeholder engagement, and long-range thinking about program improvement.

Additionally, Torres, Ulmer, and Aschenbrener (2008) found during January and February teachers devoted the highest number of hours to SAEs. They concluded while work with experiential learning (SAEs) may create seasonal increases in time, administrative duties, planning, and instruction are more consistent throughout the year. One might suspect it is within the seasonally high-demand time periods that teacher stress is at its highest. Further, supervision and facilitation of SAEs is a challenging task for teachers. Given the breadth and diversity of student experiences and opportunities for experiential learning, these mid-career teachers may feel underprepared for the task of encouraging "*active participation by all students in a year-round experiential learning program*" (The National Council for Agricultural Education, 2009).

The standard least stressed about was Certified Agricultural Teachers and Professional Growth. This standard was also ranked lowest in terms of wanted/needed professional development. This is likely because XLR8 participants each had 7 to 15 years of teaching experience and had already fulfilled licensure and certification requirements. As indicated by the demographics, these individuals are seeking opportunities to further develop themselves through advanced education and/or leadership involvement. This is consistent with the experimentation/diversification phase of the career life cycle described by Huberman (1989) and Berman's (2004) suggestion that challenging professional development and leadership involvement may increase professional commitment. If these participants already have gotten involved in opportunities, they may not feel the need for additional help in this area.

Congruence was found between the most stressful standards and the standards XLR8 participants identified as areas of needed professional development. Experiential Learning and Program Design and Instruction emerged as the two areas in which professional development was most desired. Perhaps these mid-career teachers are at a point in their careers where they are comfortable with the expectations for classroom instruction and leadership development within a complete agricultural education program and are ready to focus additional energy toward experiential learning opportunities. The desire for professional development related to Program

Design and Instruction seems consistent with findings by Torres, Ulmer, and Aschenbrener (2008) who concluded experienced teachers spend more time on teaching-related activities (e.g., grading, FFA activities, and CDE preparation) and professional activities (e.g., program management, meetings, and in-service). Given that these teachers are all considered mid-career agricultural education teachers, they too may have recognized this and are seeking ways to manage, or minimize, this time commitment.

Teachers included in this study are experiencing moderate levels of burnout on each of the three scales of the MBI-E. Though similar to findings of Chenevey, Ewing, and Whittington (2008), this remains concerning as it implies these teachers are questioning contributions to student growth and achievement, may have less than positive attitudes towards ones' students, and feel emotionally drained (Maslach et al., 1996) to some degree. While none of the findings indicated high levels of burnout, to ensure teacher retention in the profession, efforts must be made to lower these levels further. Previous research conducted by Croom (2003) suggested agricultural education teachers experienced moderate levels of emotional exhaustion, low levels of depersonalization, and a high degree of personal accomplishment. In this case, XLR8 participants reported lower levels of burnout on the personal accomplishment subscale, yet higher levels on depersonalization, when compared to Croom's findings. Why might XLR8 participants display such differences from those previously studied? Has something changed in the profession to impact teacher burnout or is this related to participants' career stage? Kitchel et al. (2012) encouraged further research regarding sources of emotional exhaustion for agricultural education teachers and ways to potentially combat teacher burnout.

It was concluded mid-career agricultural education teachers who participated in XLR8 are generally satisfied with their job, which is consistent with previous literature regarding job satisfaction among agricultural education teachers (Walker, Garton & Kitchel, 2004). While this can be viewed as a positive finding, more research is needed to learn more about improving job satisfaction and minimizing job stress and burnout.

Practical implications abound related to this line of research. First and foremost, administrators, state leaders, and teacher educators should be aware of and concerned about job stress, burnout, and job satisfaction among agricultural education teachers. NAAE (2016) should continue efforts to create targeted professional development opportunities based on agricultural education teachers' career stages. Secondly, opportunities related to the NQPS should be developed and provided to ensure agricultural education teachers are performing at their fullest potential. Additional research may provide clarity regarding specific segments of the NQPS in which agricultural education teachers at various career stages would benefit from new or expanded support, resources, or professional development. For mid-career agricultural education teachers, NQPS related professional development should address Experiential Learning and Program Planning and Evaluation. This aligns with the recommendations apparent within the Ag Teacher's Lifecycle graphic (NAAE) suggesting that professional development for mid-career agricultural education teachers should focus on further developing pedagogical and technical skills. Additionally, regional or state-based professional development programs for mid-career teachers are encouraged, to meet the needs of teachers not participating in national level programming.

While this study only involved a small population of teachers involved in targeted professional development opportunity, what might be gained by seeking this type of information from a broad population of secondary agricultural education teachers at various career stages? Certainly, given current supply and demand issues within the profession, it is essential a high proportion of agricultural education teachers be retained in the classroom from year to year. In addition, a longitudinal study focusing on this group of mid-career agricultural education teachers

should be conducted to explore implications of job stress, burnout, and satisfaction related to retention in the profession and to evaluate the benefit and outcomes associated with professional development opportunities related to the NQPS.

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